# Refine Search

Your wildcard search against 10000 terms has yielded the results below.

### Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	11

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L17			Refine Search
	Recall Text	Clear	Interrupt

### **Search History**

DATE: Monday, February 20, 2006 Printable Copy Create Case

Set Name side by side	Query	<u>Hit</u> Count	Set Name result set
	$PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, JPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, EPAB, DWPI, TDBD; \ THES = ASSIGNEE; \ PLUR = YBSOC, \ PLUR = $	ES;	
OP = OR			
<u>L17</u>	L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	11	<u>L17</u>
<u>L16</u>	11 and (voice\$ with recogni\$) and (voice\$ with synthesi\$)	51	<u>L16</u>
<u>L15</u>	113 and L14	2	<u>L15</u>
<u>L14</u>	L12 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	2	<u>L14</u>
DB=B	PGPB, USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L13</u>	L12 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$) and (terminat\$ or stop\$)	2	<u>L13</u>
DB=B	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; THES=ASSIGNEE; PLUR=YE	ES;	
OP = OR			
<u>L:12</u>	18 or 19 or 110 or 111	22	<u>L12</u>

DB = 0	USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L11</u>	(5864771   6009355   6144318   6115668   5177685   6075467   5699056   6154123   6101443   6092005)![PN]	10	<u>L11</u>
DB = I	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; THES=ASSIGNEE; PLUR=YES	;	
OP = OR			
<u>L10</u>	('6351698')[ABPN1,NRPN,PN,TBAN,WKU]	2.	<u>L10</u>
<u>L9</u>	('6351698')[URPN]	10	<u>L9</u>
<u>L8</u>	l6 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	1	<u>L8</u>
<u>L7</u>	L6 and (terminat\$ or stop\$)	3	<u>L7</u>
<u>L6</u>	L5 and (interacti\$ with communicat\$)	. 4	<u>L6</u>
<u>L5</u>	L4 and (map\$ or navigat\$)	32	<u>L5</u>
<u>L4</u>	11 and (12 or L3)	32	<u>L4</u>
<u>L3</u>	(voice\$ with recogni\$) and (voice\$ with synthesi\$) and @pd<=20010423	2151	<u>L3</u>
<u>L2</u>	(voice\$ with recogni\$) and (voice\$ with synthesi\$) and @ad<=20010423	3246	<u>L2</u>
T.1	701/211 ccls	985	I.1

## END OF SEARCH HISTORY

### First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print

L13: Entry 1 of 2

File: USPT

Jul 8, 2003

DOCUMENT-IDENTIFIER: US 6591168 B2

TITLE: System and method for adaptable mobile user interface

### Detailed Description Text (4):

FIG. 2 illustrates a preferred process performed by system 20. At block 60, system 20 and, more specifically, processor 32, receives presentation content. The presentation content is preferably received at communications device 36 from a server transmitted over a network (not shown). At decision block 62, processor 32 determines if any vehicle emergency condition exists based on information received from the other vehicle systems. If processor 32 determines that a vehicle emergency condition exists, processor 32 stops all output of received presentation content to any one of the components of user interface 22 (block 64). Examples of a vehicle emergency condition that may cause the processor to stop output presentation content to user interface 22 are signals received from the engine that indicate engine overheating or a signal that indicates the operator has applied brakes to the point where an anti-braking system is activated.

#### Detailed Description Text (5):

If, at decision block 62, processor 32 determines that there is not a vehicle emergency condition, processor 32 receives vehicle condition information (block 66). The vehicle condition information comes from a number of sources that generate signals, such as GPS 34 or a speedometer. At block 68, processor 32 outputs presentation content through user interface 22 based on the vehicle condition information. This step involves determining the substance and format of the presentation content to display on display 26 or broadcast on speakers 28 of user interface 22. For example, when the vehicle is parked, processor 32 presents all or nearly all of the received presentation content. As the vehicle condition changes, for example, the vehicle picks up speed, processor 32 changes the presentation content information that is shown on display 26. The change in presentation content may also involve shifting presentation of information from visual display to audio broadcast as output through speakers 28. In one example, the presented content is a full detailed map of the vehicle's location that includes directions to a previously requested destination. Based on the vehicle speed, or the rate of change in vehicle speed or direction, the detail shown on the map will be altered. As the vehicle speed increases, the detail shown on the map is reduced, for example, to include only the vehicle's present location in relation to nearby streets or intersections. Some or all of the presentation content, or map directions, may be translated to audio format and broadcast to the vehicle operator via speakers 28. In other examples, change in vehicle condition may result in alteration of the font or size of text, icons and graphics presented on the display, as well as increased or decreased audio broadcast. FIG. 3 illustrates an example, based on vehicle speed, of how processor 32 changes the output that is presented over user interface 22.

#### Detailed Description Text (7):

FIG. 3 illustrates an example of the process performed at block 68 of FIG. 2. At block 80, vehicle speed information is determined, for example by reference to the vehicle speedometer. If the vehicle's speed is less than or equal to 25 mph, processor 32 generates a detailed display to present on display 26 of user interface 22 (block 82). As the speed of the vehicle increases, the amount of

detailed visual information generated for display is reduced. Thus, if the vehicle speed is greater than 25 mph but less than or equal to 40 mph, processor 32 generates a display with less visual information than was generated for vehicle speeds of less than or equal to 25 mph (block 84). When the speed is greater than 40 mph but less than or equal to 70 mph, processor 32 reduces not only the amount of detail to be displayed on display 26, but also increases the font size of any text included in the displayed presentation content and changes the color to make it easier for an operator to view (block 86). When the speed is greater than 70 mph, processor 32 stops generating display information for presentation on display 26 and switches to a pure audio presentation for output over the speakers 28 (block 88). The specific speed ranges described are exemplary only. The exact trigger speeds may vary according to various factors, such as road conditions, vehicle specification, vehicle operator skill, etc., as well as user preference. Likewise, the output format of the presentation content may be varied according to user interface hardware or software constraints as well as user preference.

<u>US Reference Patent Number</u> (19): 6351698

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### **Hit List**

First Hit

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

Search Results - Record(s) 1 through 10 of 11 returned.

☐ 1. Document ID: US 20020065606 A1

Using default format because multiple data bases are involved.

L17: Entry 1 of 11

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020065606

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020065606 A1

TITLE: Navigation apparatus and communication base station, and navigation system

and navigation method using same

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME Kawai Tomowski CITY Nara STATE

COUNTRY

Kawai, Tomoyuki Maeda, Kengo

Nara

JP JP

US-CL-CURRENT: 701/211; 340/988

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De

☐ 2. Document ID: US 6587786 B1

L17: Entry 2 of 11

File: USPT

Jul 1, 2003

US-PAT-NO: 6587786

DOCUMENT-IDENTIFIER: US 6587786 B1

TITLE: Sensor free vehicle navigation system utilizing a voice input/output interface for routing a driver from his source point to his destination point

Full Title Citation Front Review Classification Date Reference

3. Document ID: US 6529826 B2

L17: Entry 3 of 11

File: USPT

Mar 4, 2003

Record List Display Page 2 of 4

US-PAT-NO: 6529826

DOCUMENT-IDENTIFIER: US 6529826 B2

TITLE: Navigation apparatus and communication base station, and navigation system

and navigation method using same

Full Title Citation Front Review Classification Date Reference

4. Document ID: US 6401029 B1

L17: Entry 4 of 11

File: USPT

Jun 4, 2002

US-PAT-NO: 6401029

DOCUMENT-IDENTIFIER: US 6401029 B1

TITLE: Assist device in designation of destination

Full Title Citation Front Review Classification Date Reference Advanced Claims KVMC Draw. De

5. Document ID: US 6351698 B1

L17: Entry 5 of 11

File: USPT

Feb 26, 2002

US-PAT-NO: 6351698

DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

Full Title Citation Front Review Classification Date Reference Claims KMC Draw. De

☐ 6. Document ID: US 6208932 B1

L17: Entry 6 of 11

File: USPT

Mar 27, 2001.

US-PAT-NO: 6208932

DOCUMENT-IDENTIFIER: US 6208932 B1

\*\* See image for <u>Certificate of Correction</u> \*\*

TITLE: Navigation apparatus

Full Title Citation Front Review Classification Date Reference <mark>இதற்கு இதிருக்க</mark> Claims KMC Draw De

7. Document ID: US 5928308 A

L17: Entry 7 of 11

File: USPT

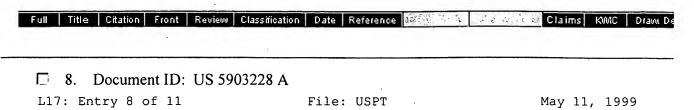
Jul 27, 1999

US-PAT-NO: 5928308

DOCUMENT-IDENTIFIER: US 5928308 A

\*\* See image for Certificate of Correction \*\*

TITLE: Navigation system for vehicles

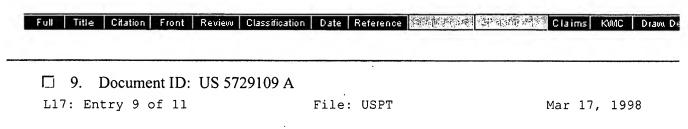


US-PAT-NO: 5903228

DOCUMENT-IDENTIFIER: US 5903228 A

TITLE: Map information display apparatus and traveling route display apparatus and

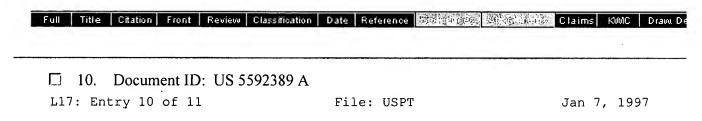
route guidance apparatus for moving body



US-PAT-NO: 5729109

DOCUMENT-IDENTIFIER: US 5729109 A

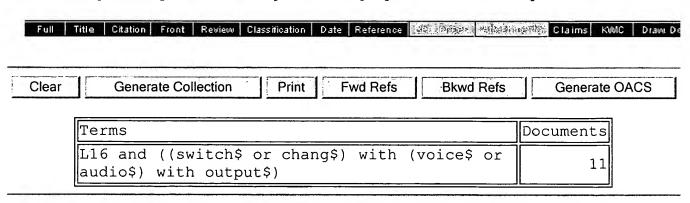
TITLE: Navigation system and intersection guidance method



US-PAT-NO: 5592389

DOCUMENT-IDENTIFIER: US 5592389 A

TITLE: Navigation system utilizing audio CD player for data storage



Display Format: - Change Format

# **Hit List**

First Hit Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

Search Results - Record(s) 11 through 11 of 11 returned.

☐ 11. Document ID: US 5406492 A

Using default format because multiple data bases are involved.

L17: Entry 11 of 11

File: USPT

Apr 11, 1995

US-PAT-NO: 5406492

DOCUMENT-IDENTIFIER: US 5406492 A

TITLE: Directional voice-type navigation apparatus

DATE-ISSUED: April 11, 1995

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Suzuki; Seiichi

Tokyo

JP

US-CL-CURRENT: 701/211; 340/996, 381/86, 701/209

Full   T	Title Citation	Front Review	Classification	Date	Reference	Se sataments	2015	iustes:	Claims	KWIC	Draw
Clear	Genera	ate Collection	Print		wd Refs	Bkwo	Refs		Genera	ate OA	.CS
	Terms							Doc	ument	s	
		((switchs		ng\$)	with	(voice\$	or		1	.1	

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First Hit

Your wildcard search against 10000 terms has yielded the results below.

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Generate OACS

**Search Results -** Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6535743 B1

Using default format because multiple data bases are involved.

L6: Entry 1 of 4

File: USPT

Mar 18, 2003

US-PAT-NO: 6535743

DOCUMENT-IDENTIFIER: US 6535743 B1

TITLE: System and method for providing directions using a communication network

DATE-ISSUED: March 18, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Kennedy, III; William C. Dallas TXBeasley; Dale E. Flower Mound TXParker; Terry S. Monticello IN Russell; Thomas D. Plano TΧ Wortham; Larry C. Garland TX Saunders; William C. Dallas ΤX

US-CL-CURRENT: <u>455/456.1</u>; <u>340/988</u>, <u>701/208</u>, <u>701/209</u>, <u>701/211</u>

Full Title Citation Front Review Classification Date Reference (Control of Control of Co



☐ 2. Document ID: US 6351698 B1

L6: Entry 2 of 4 File: USPT

Feb 26, 2002

US-PAT-NO: 6351698

DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

Full Title Citation Front Review Classification Date Reference (1995) Claims KMC Draw De

3. Document ID: US 6108604 A

L6: Entry 3 of 4

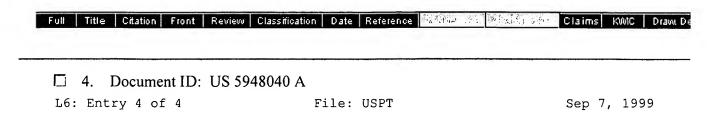
File: USPT

Aug 22, 2000

US-PAT-NO: 6108604

DOCUMENT-IDENTIFIER: US 6108604 A

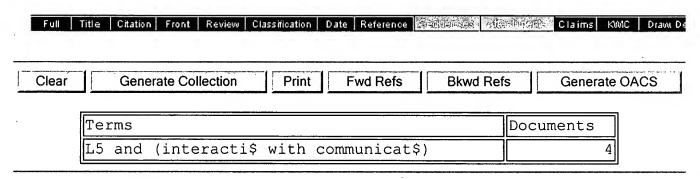
TITLE: Vehicular <u>navigation</u> system and storage medium



US-PAT-NO: 5948040

DOCUMENT-IDENTIFIER: US 5948040 A

TITLE: Travel reservation information and planning system



**Change Format** Display Format: |-

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**End of Result Set** 

**Generate Collection** Print

L8: Entry 1 of 1

File: USPT

Feb 26, 2002

US-PAT-NO: 6351698

DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

DATE-ISSUED: February 26, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Kubota; Tomoki Tokyo-to JΡ

Hori; Koji Tokyo-to JΡ Mazda; Manabu Chiba-ken JΡ Adachi; Kazuhide Tokyo-to JP JP

Mukai; Kouji Tokyo-to

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Kabushikikaisha Equos Research JΡ 03

APPL-NO: 09/492520 DATE FILED: January 27, 2000

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY APPL-NO

JP 11-021481 January 29, 1999

INT-CL-ISSUED: [07] G08 G 1/09, G08 G 1/123, G06 F 17/00

US-CL-ISSUED: 701/51; 701/209, 701/211, 340/988 US-CL-CURRENT: 701/51; 340/988, 701/209, 701/211

FIELD-OF-CLASSIFICATION-SEARCH: 701/51, 701/1, 701/72, 701/117, 701/209, 701/211, 340/996, 340/438, 340/457, 340/460, 340/461, 340/490, 340/504, 340/505, 340/573, 340/988, 340/436, 340/576, 340/439, 340/815.4

APPL-DATE

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Clear Search ALL

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

<b>.</b> :	5177685	January 1993	Davis et al.	364/443
	<u>5699056</u>	December 1997	Yoshida	340/905
	<u>5864771</u>	January 1999	Yokoyama et al.	701/208
Γ.	<u>6009355</u>	December 1999	Obradovich et al.	701/1
	6075467	June 2000	Ninagawa	340/995
Γ	6092005	July 2000	Okada	701/1
$\Box$	6101443	August 2000	Kato et al.	701/210
Γ	6115668	September 2000	Kaneko et al.	701/207
	6144318	November 2000	Hayashi et al.	340/995
	6154123	November 2000	Kleinberg	340/436

#### FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	CLASS
9-14957	January 1997	JP	
9-159473	June 1997	JP	

ART-UNIT: 3661

PRIMARY-EXAMINER: Nguyen; Tan

ASSISTANT-EXAMINER: Tran; Dalena

ATTY-AGENT-FIRM: Lorusso & Loud

#### ABSTRACT:

An interactive <u>navigation</u> system includes a <u>navigation</u> processing unit, a current position sensor, a speaker, a microphone and a display. When it is preliminary inferred, based on receipt of a detection signal from the sensor, that a vehicle has probably been diverted from a drive route determined by the <u>navigation</u> processing unit, a machine voice question is produced through the speaker for confirmation of the inferred probability of diversion. A driver or user in the vehicle answers the question, which is input through the microphone and analyzed to be affirmative or negative, from which a final decision is made as to the vehicle diversion. In a preferred embodiment the question is spoken by a personified agent who appears on the display. The agent's activities are controlled by an agent processing unit. Communication between the agent and the user improves reliability and accuracy of inference of any vehicle condition which could not be determined perfectly by a sensor only.

14 Claims, 14 Drawing figures

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